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Minutes of the Exchange of Information Meeting  
 Colorado Department of Health  
 EG&G Rocky Flats, Inc.

Date: 28 August 1990

Location: Broomfield City  
 Council Chambers

Attendees:

P. Elofson-Gardine

- Concerned Health Techs. for a  
 Cleaner Colorado

J. Day

- Rocky Mountain News

C. Videtich

- City of Arvada

H. Mahan

- City of Broomfield

K. Schnoor

- City of Broomfield

S. Ramer

- City of Westminster

J. Bruch

- Colorado Dept. of Health -  
 RFPU

D. Fox

- Colorado Dept. of Health -  
 RFPU

A. Harrison

- Colorado Dept. of Health -  
 RCD

A. Hazle

- Colorado Dept. of Health -  
 RFPU

C. Johannes

- Colorado Dept. of Health -  
 HWMD

R. Terry

- Colorado Dept. of Health -  
 RCD

S. Duletsky

- Dept. of Energy, Rocky Flats Office

J. Rampe

- Dept. of Energy, Rocky Flats Office

R. Almquist

- EG&G Rocky Flats, Inc.

N. Daugherty

- EG&G Rocky Flats, Inc.

D. Elliott

- EG&G Rocky Flats, Inc.

R. Fiehweg

- EG&G Rocky Flats, Inc.

W. Heimbach

- EG&G Rocky Flats, Inc.

J. Paukert

- EG&G Rocky Flats, Inc.

J. Schwartz

- EG&G Rocky Flats, Inc.

G. Setlock

- EG&G Rocky Flats, Inc.

R. Stevens

- EG&G Rocky Flats, Inc.

N. Daugherty stated that there were no changes to the List of Radioactive Materials Associated with Rocky Flats Plant since the last Quarterly Update.

K. Schnoor presented the City of Broomfield Radiometric Monitoring Report. All reported data for radioactivity analyses were within the levels of background concentrations. The only volatile organic compounds identified were byproducts associated with the chlorination process for Broomfield's treated drinking water.

S. Ramer presented the City of Westminster Radiation Data Monthly Report for July 1990. All data for radioactivity analyses were within the levels of background concentrations. Volatile

organic compound data included data from June for previously incomplete analyses. The only volatile organic compounds identified were byproducts associated with the chlorination process for finished drinking water.

R. Terry presented the Colorado Department of Health Environmental Surveillance Report for July 1990. All analytical results for radioactive materials were within expected ranges and were consistent with measurements which have been taken at the same sampling locations in the past with two exceptions: 1) Two air particulate samples taken at the RF-5 Rocky Flats Plant perimeter station showed a somewhat higher than usual gross alpha radioactivity concentration with a maximum of 0.0029 pCi/m<sup>3</sup>; 2) One PM-10 air particulate sample taken at the Denver Camp A Denver metropolitan station showed a somewhat higher than usual gross alpha radioactivity concentration of 0.0049 pCi/m<sup>3</sup>. This reported concentration was the lower of two analyses run for this sample. The lower value was reported because the Total Suspended Particulate (TSP) sample for this same location and sampling period showed a normal gross alpha concentration. Since the TSP value would be expected to include and be greater than the PM-10 value, the PM-10 value was considered suspect, and the lower value only was reported. N. Daugherty requested that the uncertainty associated with the individual analyses for the three anomalous values be reported at the next meeting. Final data for a soil sample taken 20 March 1990 were presented from the 903 Pad Area at the Rocky Flats Plant. Maps of CDH air and water sampling locations at the Rocky Flats Plant were included in this report. N. Daugherty requested that the maps be corrected to indicate the present Plant boundaries.

N. Daugherty presented the July 1990 Rocky Flats Monthly Environmental Monitoring Report. Daugherty reported that air effluent total long-lived alpha activity results for July 30 - August 2, 1990 had shown a value of 0.03 pCi/m<sup>3</sup> for a sample taken in building 771 main air effluent. Since this value was above the Plant's in-house screening guide of 0.02 pCi/m<sup>3</sup>, an investigation was initiated to determine the cause. The investigation was not completed at the time of this Report; however, preliminary information indicated that the alpha activity concentration may have been caused by damage to some of the air effluent high efficiency particulate air (HEPA) filters during maintenance work in the plenum. Although all of the isotope-specific analyses had not yet been completed, those data that were available were reported. These data included a plutonium-239/-240 concentration of  $0.0078 \pm 0.0018$  pCi/m<sup>3</sup> for the sample of interest. Uranium-234 and -238 concentrations were below detection levels. Radiation dose to the public from these radioactivity releases would be well below applicable limits for protection of the public. Additional information concerning this incident is included in the Executive Summary of the Report. All isotope-specific monitoring data will be available for the August Data Report, presented at the September meeting.

Daugherty also reported that the ambient air sampling results for July 1990, included a value of  $0.000670 \pm 0.000147$  pCi/m<sup>3</sup> plutonium air concentration at the sampling location S-07. Although this air concentration is within the range historically seen for this location, it is above recent levels and represents the mean of two bi-weekly concentrations which showed somewhat greater variability than usual. No cause for this increase could be identified. Additional information is provided in the Executive Summary of the Report.

There was an exceedance of the Rocky Flats Plant's Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES) permit during July 1990. The 30-day geometric mean fecal coliform value of 320 per 100 ml sample for discharge location 001 (Pond B-3) exceeded the permit limit of 200 per 100 ml. This exceedance was primarily the

result of a single high value for the July 3, 1990 sample. The results are considered suspect; however, no rerun on the sample was possible because of the short holding time allowed before analysis. Samples taken at the outflow of the sanitary sewage treatment plant indicated that the Pond B-3 value was not the result of upset conditions at the STP.

Beginning with the July data presented in the Report, surface water effluent radioactivity concentrations included volume-weighted averages, rather than straight arithmetic averages. It is expected that volume-weighting will more accurately reflect the radioactivity quality of Plant surface water discharges. Data reported previously for January - June 1990 will be recalculated using volume-weighting and reissued in an appendix in a later report.

As a follow-up to a question asked by A. Hazle at the July 1990 meeting, Daugherty responded that variations in the confidence interval reported for water samples reflected differences in sample volumes, detector efficiency, and chemical recovery of the radioactive material of interest.

D. Elliott presented the August 1990 Engineering Update. The following General Interest Projects were included: Roof Repairs for various buildings, Laundry Facility, Electrical Distribution System, HF Piping, Road Repairs, Support Building 116, On-Site Nitrogen Plant, Medical Building Addition, TRUPACT Shipping Facility, Office Trailers, and Sewage Treatment Plant Projects. Environmental Interest Projects included: Exhaust Plenum Modifications (On hold, Bldg. 771), FU-1 Plenum (On hold, Bldg. 771), FU-2B Plenum (On hold, Bldg. 771), Ventilation System Building Supply Replacement (Bldg. 771), Shelters for Pondcrete/Saltcrete, Interim Remedial Action for the 881 Hillside, CDH Air Sampling Stations, Air Pollution Emission Notices (APENs) Study, Supercompactor (Bldg. 776), Plutonium Recovery Modification Project (On hold, Bldg. 371), and Treatment of Ponds A-4, B-5, and C-2.

There were no changes to the monitoring programs for the City of Broomfield, the City of Westminster, or the Rocky Flats Plant. R. Terry announced that the Colorado Springs, Durango, and Sterling air particulate sampling locations are being discontinued by CDH Air Pollution Control Division. The Air Pollution Control Division is now focusing on PM-10 data for determination of compliance with U.S. EPA regulations under the Clean Air Act.

R. Terry requested that a Special Agenda Item presentation be given at the September 1990 meeting to summarize the total quantity of radioactivity released from building 771 from July 30 - Aug. 2, the concentration of the air effluent, and the concentration at the perimeter of the Plant. He also asked for more information as to how the incident occurred and whether any HEPA filter damage was accidental or deliberate.

The next Information Exchange Meeting will be held at 1:30 pm, Tuesday, September 25, 1990, at the Colorado Department of Health, Denver, CO, Room 412.

*Nancy M. Daugherty*

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